



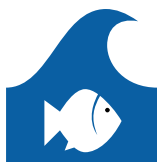
# Saint Paul Environmental-Economic Partnership Project

## • Projects •



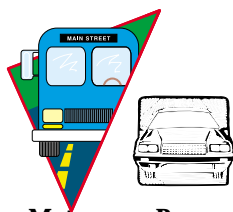
### Energy

District Cooling Service  
Hot Water District Heating and Cogeneration  
Wood-burning Biomass Plant  
Sewer Pumping Station Improvements  
Street Lighting and Signal Lamp Conversion  
Cities for Climate Protection Campaign  
Sustainable Buildings Guidelines  
High Bridge Fuel Conversion  
Conservation Improvement Project Building Retrofits  
ENERGYSTAR  
Pumping Electricity Real Time/Peak Demand Pricing  
Green Power Coalition — Wind



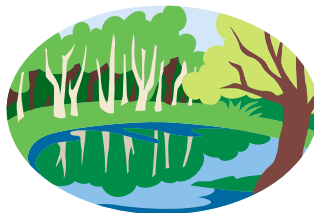
### Water Quality

Mississippi Riverfront Corridor Plan  
Stormwater Management Program  
Sewer System Rehabilitation Program  
Wetlands Restoration  
Treatment Chemicals Reduction  
Lime Sludge Dewatering  
Control of Lead in Drinking Water



### Transportation

City-County Employee Metropass Program  
Bike Lanes and Paths  
hOurCar Car-sharing System  
Traffic Calming  
Computerized Traffic Signal System  
'During Incidents Vehicles Exit to Reduce Travel Time' (DIVERTT)  
Advanced Parking Information System (A.P.I.S.)  
Light Rail/Commuter Rail/High-Speed Rail Hub  
Riverview Corridor Busway Transit Oriented Design



### Neighborhoods

Polluted Lands (Brownfields) Cleanup Program  
Empowerment Zone/Enterprise Community  
Phalen Corridor Redevelopment Initiative  
Phalen Wetland Restorations



### Forestry & Parks

Greening of the Great River Park  
Citywide Tree Planting Program  
Wood Recycling Programs



### Recycling & Waste Management

Yard Waste Compost/Brush Drop-off Sites  
Curbside and Multi-family Recycling Program Expansion  
Neighborhood Clean-Up Program  
City Buildings Recycling Programs  
'Free Market' Residential Waste Exchange and WoodWins  
Materials Recovery Facility  
Environmentally Friendly Purchasing Policies



# Saint Paul Environmental-Economic Partnership Project

## *Working for a Sustainable Community*

Municipalities need not choose between a healthy and environmentally sound community on the one hand, and a prosperous community on the other. We can have both.

The Environmental-Economic Partnership Project was initiated in 1993 to implement the City's Urban CO<sub>2</sub> Reduction Plan, adopted by the City Council in 1992.

## • Project Goals •

- Saint Paul City Council pledged in 1992 to reduce CO<sub>2</sub> emissions 20% below 1988 base year levels of 5,700,000 tons/year by 2005 = 2,393,000 tons/year (20% of projected 2005 emissions), with an intermediate goal of 7.5% by 1997 = 899,000 tons/year (=Kyoto).
- "To encourage present activities and identify future activities that improve both the environmental and economic health of Saint Paul."
- "To foster actions for sustainable development, including energy retrofits in municipal buildings, recycling and waste reduction, equipment/lighting conversions, water treatment efficiency changes, land use planning and neighborhood development, district heating/cooling and transportation improvements."

\*All CO<sub>2</sub> reduction calculations/numbers derived using ICLEI Greenhouse Gas Emissions Software by Torrie Smith Associates. Documented CO<sub>2</sub> reductions are from City and partner-sponsored projects only.

## • Project Objectives •

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|--|--|
| <ul style="list-style-type: none"><li>• <b>Public Health and Safety</b><br/>Reduce local air pollution levels<br/>Preserve public health<br/>Relieve traffic congestion and prevention of further urban sprawl</li></ul> | <ul style="list-style-type: none"><li>• <b>Strengthened Economy</b><br/>Increase employment<br/>Create new marketing opportunities<br/>Lower operating costs<br/>Reduction in energy bills for government, business, and families through increased efficiency</li></ul> |
| <ul style="list-style-type: none"><li>• <b>Fiscal Responsibility</b><br/>Reduce energy bills<br/>Reduce waste and future clean up costs<br/>Reduce maintenance &amp; operating costs</li></ul>                           | <ul style="list-style-type: none"><li>• <b>Promoting the City</b><br/>Prevent further urban sprawl<br/>Create amenities that draw people<br/>Local, national and international attention</li></ul>   |

## Saint Paul Public Works

*Responsive Services • Quality Facilities • Employee Pride*

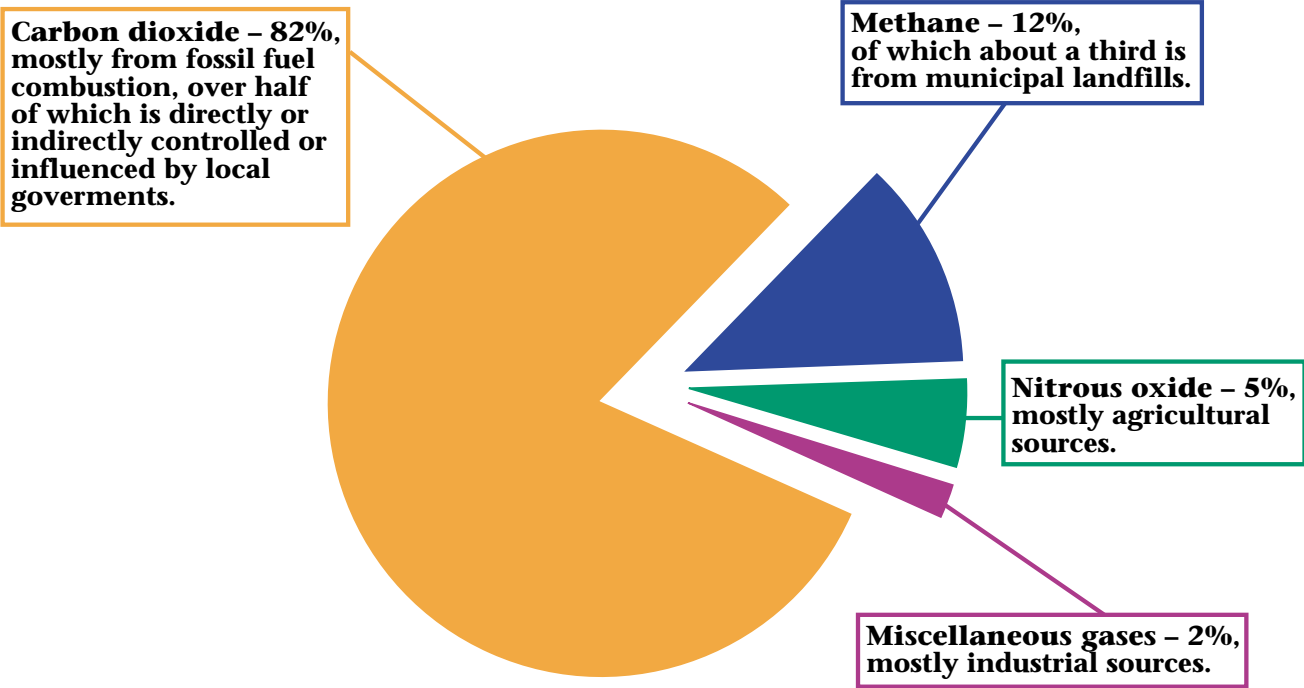
• **CO<sub>2</sub> Reduction Plan Strategies** •

	CO <sub>2</sub> target reduction	Reduction achieved 1992-2003
Strategy #1 - Municipal Action Plan	10,800 tons	22,600 tons
Strategy #2 - Diversification of the Transportation Sector	731,000 tons	undetermined
Strategy #3 - Urban Reforestation	3,600 tons	3,100 tons
Strategy #4 - Energy Efficiency	1,354,400 tons	242,800 tons
Strategy #5 - Energy Supply	283,200 tons	595,400 tons
Strategy #6 - Recycling and Waste Prevention	10,800 tons	89,900 tons

Ongoing and planned E-EPP Project CO<sub>2</sub> Reduction = 960,000 tons per year = 40% of 2005 goal of 2,393,800 tons CO<sub>2</sub> reduction = 110% of 1997 intermediate goal of 899,700 tons (exceeds Kyoto Protocol).

Total cost savings per year = \$59,800,000

**Where do GHG emissions come from?**



• **Primary Project Partners** •

**District Energy Saint Paul, Inc. (DESP)**

- Private, non-profit, community-based corporation founded in 1979.
- DESP operates the largest hot water district heating system in North America.
- 80% of downtown Saint Paul’s building space, including State Capitol Complex and 300 single-family residences.
- District Cooling Saint Paul, Inc., began providing cooling service in 1993. Currently 45 buildings in Saint Paul.
- Converting to 80% biomass-generated power from burning 280,000 tons/year of clean wood waste at cogeneration facility downtown Saint Paul; supply 25 MW to the Xcel Energy grid beginning 2002.
- District Energy ([www.districtenergy.com](http://www.districtenergy.com)) provides energy management assistance to downtown building owners.

**Xcel Energy (formerly Northern States Power/NSP)**

- City’s Conservation Improvement Project financed by Xcel loans began in 1993.
- Xcel will convert High Bridge coal plan to natural gas in 2007, the largest voluntary emissions reduction in Minnesota history.
- Savings produced by the improvements are roughly equal to the city’s loan payments.
- Improvements pay for themselves within 10 years or sooner.
- Xcel benefits by avoiding need to build new power plants and by reducing peak demand at its existing plants.
- Xcel signed power purchase agreements with District Energy Saint Paul to purchase 25 MW of biomass-generated power beginning in 2003.
- Xcel affiliate NRG Inc. operates 1000 ton per day Ramsey/Washington County refuse-derived-fuel facility which burns Saint Paul solid waste at Xcel power plants for electricity.
- Xcel has CIP projects with many other public and private entities in Saint Paul.

**Saint Paul Neighborhood Energy Consortium (NEC) and Eureka Recycling**

- Eureka opening materials recovery facility and expanding to weekly two-stream collection with plastics in 2004.
- Eureka Recycling operates curbside and multi-family recycling programs for City’s 110,000 households; 222-SORT recycling hotline; and Twin Cities Free Market.
- City is working with NEC to increase energy audits and provide insulation and conservation advice for homes and businesses; and establish our hOurCar car-sharing system..
- [www.eurekarecycling.org](http://www.eurekarecycling.org), [www.spnec.org](http://www.spnec.org), [www.twincitiesfreemarket.org](http://www.twincitiesfreemarket.org), [www.hourcar.org](http://www.hourcar.org)